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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/723,505	11/26/2003	Dale G. Swan	SRM0006/US	8953	
D 11 W	7590 11/21/2007		EXAM	INER	
Paul L. Weaver Kagan Binder, PLLC Maple Island Building, Suite 200 221 Main Street North			NAFF, DAVID M		
			ART UNIT	PAPER NUMBER	
	Stillwater, MN 55082			1657	
			MAIL DATE	DELIVERY MODE	
			11/21/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/723,505	SWAN ET AL.				
Office Action Summary	Examiner	Art Unit				
	David M. Naff	1657				
The MAILING DATE of this communication app	l					
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period v  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 27 A	<u>ugust 2007</u> .					
,						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-11,13-21 and 28-32 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) 32 is/are allowed.						
6)⊠ Claim(s) <u>1-10, 13-21 and 28-31</u> is/are rejected.						
7)⊠ Claim(s) <u>11</u> is/are objected to. 8)□ Claim(s) are subject to restriction and/or election requirement.						
are subject to restriction and/o	r cicolon requirement.	•				
Application Papers						
9) The specification is objected to by the Examine						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
<del>,</del>	ammor. Note the attached Office	7,101,011,011,111,111,111,111,111,111,11				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
COS the ditables detailed construction a net of the columns depict her to see the						
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date  5) Notice of Informal Patent Application Other:						
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#### DETAILED ACTION

A response of 8/27/07 presented arguments, and did not amend the claims.

Claims examined on the merits are 1-11, 13-21 and 28-32, which are all claims in the application.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

10 A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10, 13-21 and 28-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Chudzik et al (7,094,418 B2).

Chudzik et al disclose a composition containing a cross-linkable macromer and an accelerator, which can be N-vinyl caprolactam (col 11, line 14). The N-vinyl caprolactam contains a carbonyl, which can be a biocompatible functional group. The composition of Chudzik et al is the same as presently claimed.

### Response to Arguments

The response urges that the carbonyl group, which is contained by the N-vinyl caprolactam disclosed by Chudzik et al as a polymerization accelerator, is not a biocompatible functional group as required by

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the claims. Additionally, the response refers to a compound of formula V and a compound II disclosed by the present specification as a polymerization accelerator of the invention, which contains a Z group not contained by the N-vinyl caprolactam of Chudzik et al.

This argument is unpersuasive since the claims do not require the polymerization accelerator to have a formula with a Z group as shown by formula V, or the accelerator to be a Z group-containing compound Specific polymerization accelerator compounds disclosed in the specification must be required by the claims to be the polymerization accelerator compound of the claims. Merely disclosing specific polymerization accelerator compounds in the specification does not necessitate the compounds be in the claims. The carbonyl group of the N-vinyl caprolactam of Chudzik et al is capable of reacting, and therefore is functional. Furthermore, the carbonyl group is biocompatible since there is seen nothing to prevent it from being biocompatible. If the carbonyl group is not biocompatible, then the N-vinyl caprolactam compounds disclosed in the present specification would not be biocompatible since the compounds contain a carbonyl group.

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# Claim Rejections - 35 USC § 103

Claims 1-10, 13-21 and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hubbell et al (5,529,914) or Hubbell et al (6,258,870 Bl).

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Hubbell et al ('914) and ('870) disclose a method involving combining a macromer with a photoinitiator and a polymerization accelerator, and polymerizing the macromer. For example, see claims 1, 67 and 68 of Hubbell et al ('914) and claims 1, 30 and 31 of Hubbell et al ('870).

A composition as presently claimed would have been obvious from the method of Hubbell et al ('914) or ('870) since carrying out the method requires combining the macromer, photoinitiator and accelerator prior to polymerizing. Accelerators disclosed by Hubbell et al ('914) and ('870) inherently contain a biocompatible functional group as required by the claims. The conditions of dependent claims are inherent in conditions used by Hubbell et al, or are sufficiently similar to conditions used by Hubbell et al to be obvious from conditions disclosed by Hubbell et al. For example, acrylic acid contains a carboxylate as in claim 10, and accelerators disclosed Hubbell el al are inherently capable of binding albumin as in claim 10. Accelerators are disclosed Hubbell et al that contain N-vinyl as in claim 12, and N-vinyl-pyrolidinone disclosed by Hubbell et al contains a carbonyl as in claim 13, an N-vinyl amide as in claim 14, and a heterocyclic ring as in claim 15. Hubbell et al disclose macromers that are polyamino acids, polysaccharides or proteins, and the macromers of claims 28-31 would have been obvious from the macromers disclosed by Hubbell et al.

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# Response to Arguments

The amendment urges that the claims now require the accelerator to comprise an N-vinyl group. However, Hubbell et al disclose accelerators containing an N-vinyl group. For example, see claim 30 of Hubbell et al '870 where N-vinyl pyrolidinone, 2-vinyl pyridine, 1-vinyl imidazole and 9-vinyl carbazole are disclosed. These accelerators inherently contain a compatible functional group. For example, N-vinyl pyrolidinone contains a carbonyl group. For the type of reasons set forth above, the claims do not require a different polymerization accelerator, and the carbonyl group of the N-vinyl pyrolidinone is a biocompatible functional group. Due to the pyrolidinone containing an N-vinyl group and a carbonyl group, it would be capable of binding albumin. The claims do not require the polymerization accelerator to contain a long chain fatty acid, which the response urges is not disclosed by Hubbell et al.

#### Conclusion

Claim 11 is allowable, but is objected to as being dependent on a rejected claim.

Claim 32 is allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Naff whose telephone number is 571-272-0920. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David M. Naff Primary Examiner Art Unit 1657

DMN

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